

## CLAIMS

- 09786309 060601
- ~~1.~~ A mutagenesis method of a gene of a vertebrate animal, by using a psoralen derivative.
  2. A method according to claim 1, wherein the psoralen derivative is trimethylpsoralen.
  3. A method according to claim 1 or 2, wherein the vertebrate animal is zebrafish.
  4. A method according to any one of claims 1 to 3, wherein the gene is a germ cell gene.
  5. A method according to any one of claims 1 to 4, wherein the mutated region is a region containing a pyrimidine base.
  6. A method for preparing the gene mutated by the method according to any one of claims 1 to 5.
  - ~~7.~~ A method for analyzing the function of a gene of a vertebrate animal, comprising inducing mutagenesis in a gene region containing a pyrimidine base by using a psoralen derivative and expressing the mutated gene and examining the correlation thereof.

Add A<sup>1</sup>